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Learners' Attitudes toward the Effectiveness of Mobile Assisted Language Learning (MALL) in L2 Listening Comprehension

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Abstract

Keegan (2003) believes that M (mobile)-learning will provide the future of learning. MALL (Mobile Assisted Language Learning) has just started to move learners and teachers out of the classroom setting into the real world. Using mobile phones, teachers can provide a rich learning environment for learners, although there are still issues that must be considered before they can reach their full potential. Various researches suggest that collaborative speaking and listening skills can be successfully done by mobile phone capabilities. It can be argued that M-learning involves the use of any portable learning materials, including audiobooks, audio-cassettes, audio-CDs, and any portable radios and DVD players. Trifanova et al. (2004, p.3) define mobile devices as "… any device that is small, autonomous and unobtrusive enough to accompany us in every moment".
This research aimed to investigate Iranian EFL learner's attitudes toward the effectiveness of Mobile Assisted Language Learning on their Listening comprehension. The first research question concerns a comparison of the effect of cell-phone based audiobooks versus its traditional counterpart that is CD – ROM / audio cassette based audiobooks, and the second deals with the investigation of Iranian EFL learners' attitudes toward the technology, to that end MALL questionnaire was distributed to the experimental group, following up interviews with some participants. The results of this study indicated that the experimental group receiving instruction through cell-phone based audiobooks outperformed the control group on their listening comprehension.

Key words: Mobile Learning Technologies in Education; MALL; Learner's Attitude; Listening Skill

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1. Introduction

The mobility of modern learners provides a dynamic environment for learning; the mobile technology, while essential, is only one of the different types of technology and interaction employed. The learning experiences cross spatial, temporal and/or conceptual borders and involve interaction with fixed technologies as well as mobile devices (Kukulaska- Hulme and Traxler 2005). It could be argued that M-learning involves the use of any portable learning materials, so it includes books, audio-cassettes, audio-CDs, and portable radios and DVD players. At the same time, M-learning usually concentrates on the most recent technologies. Trifanove et al. (2004, p. 3) define mobile devices as "… any device that is small, autonomous and unobtrusive enough to accompany us in every moment". Typically, M-learning is identified both by being available "anywhere, anytime" (Geddes 2004) and by the tools used: Mobile learning can perhaps be defined as "any educational provision where the sole or dominant technologies are handheld or palmtop devices" (Traxler 2005).

With the inevitable integration of mobile technology into our lives, we can claim that it has already become a familiar part of the everyday lives of the majority of people in Iran. As they walk down the street, sits in a lecture hall, or even lies down on a bed using their cell phones. But not surprisingly, its use as an educational tool has not been very apparent compared to its non-educational uses. Cell phone as a learning tool can be one of these many innovative and exciting ways of grappling with learners' needs. To justify learners' needs in learning English, especially during the class times, it seems that M-learning plays an important role. The main purpose of this study, thus, is to investigate the impact of Mobile Assisted Language Learning (MALL) on EFL learners' language learning skills, especially listening skill and also the current research tries to assess the learners' attitudes towards MALL. The following research questions are going to be answered in this study:

1. Does MALL have any effect on Iranian EFL learners listening comprehension?
2. What are the Iranian EFL learners' attitudes toward MALL?

2. Review of Related Literature

2.1. Mobile Learning Technologies in Education

There have been many scenarios describing the use of handheld technology both in and out of the classroom. The difference between the learning that goes on in school and out has often been addressed (Lave & Wenger 1991). Miettinen (1999) has pointed out that school learning is characterized by memorization and reproduction of school texts where by teacher talk dominates, and students' activity is largely limited to answering questions formulated by the teacher. In such a learning culture, if one draws on examples of mobile technology in classrooms, one can say that handheld devices can be regarded as an "intruder" in the learning culture a disturbance (Mifsud 2002) and as such, a disruptive technology. Inkpen (1999) points out that one of the main advantages of handheld devices is their ease of integration into a child's world and that the products themselves become a part of the children's culture. The mobile phone has a facility that makes it better than most PCs (personal computers).

Mobile and handheld computers offer new possibilities in education. Computer technology has been criticized for being segregated from ongoing aspect of children's lives, being relegated to the "Computer room" in school, and making PCs anything but personal. It has, however, been argued that flexible access to handheld technology will provide tools help children construct knowledge their daily activities, making such technology an integral part of daily learning (Selwyn 1997).

2.2. Input, output interaction and MALL

Unlike stationary computer instruments and devices, mobile devices and cell phones are portable, socially interactive, context sensitive, connective and individual to language learners (Klopfer et al., 2002). It can be argued that learners are able to access learning materials and to communicate with their teacher and peers with fewer time and space constraints (Chinnery, 2006). Therefore, MALL activities contribute to the provision of comprehensible input, negotiation of meaning, and comprehensible output. These properties of cell phones, for example, can provide

language learners with comprehensible input through pre-programmed software, via Internet searching, and through dialogue with their teacher or peers (Nah, White, & Sussex, 2008).

These characteristics provide opportunities for negotiation of meaning, by letting language learners interact and negotiate with language learning software containing pre-programmed responses, and with real persons such as language teachers, peers and language experts. Furthermore, these properties can help the learners produce comprehensible output by writing, selecting or oral reporting based on what they have learned. They are able to respond directly from their WAP site, send mobile email or text-message, or make a call at anytime, anywhere, especially in self-access and self-selected situations outside the normal classroom. Krashen (2008) mentions that no discussion of the future of language education would be complete without some discussion of the potential of the computer; for example, the Internet has a wide selection of pedagogical texts in English, and they are followed by exercises and comprehension questions. Krashen (2008) also concludes that humans are not very good at predicting the future in both technology and political events, so MALL may prove itself to be as applicable as CALL in TEFL.

Students benefit from peer feedback which shows how the peers understand their ideas and what they need to improve. On the other hand, as they themselves also have to provide feedback to their peers, they learn to critically analyze and revise their own writing (Mendoca & Johnson, 1994). In virtual environments, such as CALL and MALL peers exchange their ideas with each other across distance. It is different from traditional face-to-face peer review in terms of time, space, and mode of interaction (Laouris & Eteokleous, 2005).

2.3. Attitude

Several research papers have developed questionnaires to measure attitude toward computers, the internet, mobile phones and PDAs respectively (Thornto & Houser, 2005; Liu, 2007; Teo et al; 2008). Selwyn (1997) measured attitude toward computers using PU and PEU factors. Teo et al (2001) examined the attitude and topic of the internet and Corlett et al (2005) surveyed wireless enabled PDA. Tai & Ting (2011) in their study toward the adoption of mobile technology for language learning teacher attitude and challenges investigated the teachers' attitude toward the use of MALL in language learning process.

What's closely pertinent to this study is the result of the study of Nah, White and Sussex (2008) investigated the potential of using cell phones to browse wireless application protocol (WAP) site for the purpose of learning listening skills. Their study focused specifically on the attitudes of language learners toward using a cell phone for this purpose. The study was based on input, interaction, output and socio-culture theories, as well as on collaborative, learner – centered, constructivist and task – based learning approaches. An experiment was carried out with a group of undergraduate students who had enrolled in required intermediate English as a foreign language (EFL) listening course at a Korean university. A WAP site was designed and used as the instrument for the experiment. They found that the language learners expressed positive attitudes toward the use of the WAP site. They also found that the WAP site can be effective for learning listening skills and for student-centered and collaborated learning. However the effect of MALL in L2 listening comprehension has not been clarified in the literature and in Iranian context almost no one has tried to do a research toward effectiveness of MALL in L2 listening comprehension. Therefore, the present study aimed to imperially investigate Iranian L2 learners' attitudes toward the use of MALL in their listening comprehension.

3. This Study

3.1. Participants

The participants of the study were four intact classes among a group of EFL learners studying at Zaban Amooz in Mahabad, Iran. They had enrolled for a general conversation course. Seventy students signed up for the course, among whom thirty-five were male and the rest were female. The classes from experimental group consisted

of 35 students (class A, 18 students and class C, 17). Comparison group also consisted of 35 students (class B, 17 students and class D, 18). Based on the average scores gained from the placement test, namely Oxford Placement Test (Hereafter the OPT) by Dave Alan (2004); the participants' level of listening comprehension was assessed. The results indicated that there was no significant difference in the participants' ability as far as their listening comprehension is concerned; therefore, 35 of the participants were randomly assigned to the experimental group, 18 females and 17 males; the comparison group consisted of the other 35 participants, 17 of whom were females, and 18 were males (see Tables 3.1 and 3.2).

3.2. Instrumentation

To gather data the researcher has used a questionnaire, audiobooks, and the OPT test. A brief explanation of each comes below.

3.3. Procedure

On the first day of the course, after the establishment of the homogeneity of the participants, they were randomly assigned to two groups. Thirty-five of the participants were randomly assigned to the experimental group, 18 females and 17 males; the comparison group consisted of the other 35 participants, 17 of whom were female, and 18 were male. The same book, Study Listening by Tony Lynch (2007), was taught for a period of 16 sessions and two sessions were allocated to the pretest and posttest.

The OPT (2004) was used to gauge students' listening comprehension. The teaching procedures followed in both groups were similar; Both groups attended the classes three days a week, females came to class even days (Saturdays, Mondays and Wednesdays) and males on odd days that is (Sundays, Tuesdays and Thursdays) from 5 to 7 p.m. The classes lasted for a period six weeks; the experimental group included (Classes A and C) and comparison groups included (Classes B and D).

One listening skills or sub-skills were introduced and taught to the students each session. Each unit of the book consisted of some exercises on the skill or sub-skill explained during the session. The only difference between the two groups was that the experimental group were given the MALL Questionnaire and required to fill it out based on the explanations given by the teacher, Explanations of the items were provided, when it was felt necessary. The experimental group was given a general picture of what the whole project was about. The participants were asked for their consent to participate in the study in advance. During the whole term the participants in the experimental group were introduced to different audiobooks. For ten minutes or so for the first few sessions, they were familiarized with how to utilize them in ways that best serves their own specific purposes. At the end of the term the same MALL Questionnaire was given to the participants in the experimental group to see how much their attitudes had changed and how helpful they then found MALL to be.

4. Results

4.1. Descriptive Analysis of the Data

In this section, the results of the OPT administered at the outset of the study are reported. The main purpose of this test was to homogenize the participants in terms of their listening comprehension. The test was given to all the participants in all the four classes which were selected for the purpose of this study at Zaban Amooz Language Institute, Mahabad. The descriptive statistics of the results of the OPT are given in Tables 4.1 and 4.2.

Table 4.1 Descriptive Statistics of the Results of the OPT on comparison group

	N	Min	Max	Mean		Std. Deviation	Variance
				Statistic	Std. Error		
Comparison Group	35	31	76	47.57143	0.17	10.63923	113.1933

Table 4.2 Descriptive Statistics of the Results of the OPT on experimental group

	N	Min	Max	Mean		Std. Deviation	Variance
				Statistic	Std. Error		
Experimental Group	35	23	66	48.45714	0.08	10.66424	113.7261

Tables 4.1 and 4.2 presents that the number of participants were 70. A mean score of 47.57 with a standard deviation of 10.63 is obtained for the comparison group, while the mean score of 48.45 with a standard deviation of 10.66 is gained for the experimental group. Concerning the statistical data presented in tables 4.1 and 4.2, we are about to come to the point that the two groups were homogeneous regarding their listening comprehension before the experiment

4.2. Results of the Post-test

After giving the specified treatments to each group, the post-test was given to the participants in order to measure their listening comprehension gains. The descriptive and analytic statistics of the results of means comparison of the two groups on the post-test are presented in the Tables 4.3 and 4.4, respectively.

Table 4.3 Descriptive Statistics for the Experimental group on the Post-test

Listening comprehension	N	Mean	Std. Deviation	Std. Error Mean
Experimental Group	35	66.31429	8.529435	0.68

Table 4.4 Descriptive Statistics for the comparison Group on the Post-test

Listening comprehension	N	Mean	Std. Deviation	Std. Error Mean
Comparison group	35	52.88571	8.601544	1.37

4.3. Results and Discussion for the First Research Question

In order to investigate the impact of cell phone-audiobooks on Iranian EFL learners' listening comprehension, the post-test was conducted, (see appendix F). The post-test was the same as the pre-test. The results of the post-test are represented in tables 4.3 and 4.4.

As the tables show, the mean of the experimental group was higher than the mean of the comparison group. This shows that the experimental group outperformed the comparison group. Also, the standard deviation of the experimental group was lower than the comparison group; this means that the participants in the experimental group were more homogenous.

As it is shown in tables 4.3 and 4.4, the effect of cell phone-audiobooks on listening comprehension is statistically significant, $t(69) = 2.38$, $p < 0.05$. The t-observed exceeds the t-critical at $p<0.05$; therefore the first null hypothesis is rejected; that is, the participants improving listening comprehension through the implementation of

MALL (audiobooks) had increased significantly more than those in the comparison group, who received instruction through CD-ROM/cassette audiobooks.

This result is in line with previous studies including Nah, White and Sussex (2008), Auld (2007), Ramirez and Alonso (2007). As Stanley (2006) notes, "…there is much to be said about involving learners in the act of publishing a podcast, especially if there is a real audience out there, which the learners can detect", the personal attachment the learners feel when they carry the file with them and the omnipresence of the file can be some of the reasons why the experimental group have outperformed the comparison group. This result confirms the effectiveness of the implementation of MALL, and that can be a good addition to the traditional ways of learning, if not a substitute.

4.4. Results and Discussion for the Second Research Question

For investigating the participants' views and experiences of listening comprehension via audiobooks, the MALL Questionnaire and a number of interviews was administered. The pre-treatment interview was done prior to the course with 8 of the participants, whose ideas and attitudes, based on the initial analysis of their response to the MALL Questionnaire, were presented. The participants were asked about the effect of cell-phone based audiobooks versus CD-ROM/audio – cassette based audiobooks on their listening comprehension. All most all of the participants mentioned that MALL is really useful because of ease of access. It is portable and can be used anywhere, anytime, and learners have more opportunity to negotiate meaning with their teachers and their peers. Table 4.5 below shows that the implementation of MALL has changed the participants' view.

Table 4.5 Repeated Measures t-test for the Experimental Groups' View toward cell phone-based, CD-ROM based and audio cassette-based Audiobooks

		Paired Differences			t	f	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	mobile based audiobooks before and after the experiment	-.512	.497	.11	-4.09	4	.000*
Pair 2	CD-ROM based audiobooks before and after the experiment	-.104	.843	.08	-.58	4	.490
Pair 3	audio cassette based books before and after the experiment	.361	.974	.21	1.31	4	.202

*p=0 .05

Table 4.5 above shows that how the implementation of MALL has changed the participants' view. That is, the difference in the first pair is statistically significant. It is presents how the participants' attitudes toward MALL have changed and how effective they have found the investigated implementation of MALL, i.e. cell phone-based audiobooks to have been in their listening comprehension.

Pair 1 indicates that the participants hold a different view toward cell phone-based audiobooks after the experiment where t (34) = 4.09 at p=0.05 exceeds its respective t-critical. However, their views toward CD-ROM audiobooks have not undergone significant change, as is clear from pair 2, where t (34) = 0.58 at p=0.05and it does not exceed the t-critical. Thus, the participants' views of the MALL implementation has dramatically changed in a way that they have become more in favor of technology-enhanced learning, a context in which cell phones seem to be the most convenient tool among the three. Pair 3 again, where t(34)=1.31 at p=0.05 and does not exceeds the t-

critical, indicates that there has not been a meaningful change in the participants' attitudes toward audio cassette-based audiobooks as an effective tool among the three options in their listening comprehension.

5. Conclusion

This research was an attempt to investigate the effectiveness of cell-phone in Iranian L2 listening comprehension, and their attitudes toward the mobile technology in educational centers. The results of this study indicated that mobile learning is an effective way of improving listening comprehension. Furthermore, the results of this research showed that cell phones are an interesting and innovative way for learning a new language. The participants said that MALL has great impact in language learning. They believed that cell-phone based audiobooks is more effective than CD-ROM based audio books in their listening comprehension. It can give more opportunities to learn and they can listen to their interest topics anywhere and anytime.

The findings of this study can be useful for both teachers and learners. Teachers can change their methods or approaches, and move toward more learner-oriented method or approaches. Learners also have more opportunity to listen to their audiobooks and improve their listening comprehension rather than only using their cell phones for everyday life.

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